What is Agro-Informatics?

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Agro-Informatics

Food and Agriculture Organization (FAO)

Agro-informatics connects information technology with the farm management, analysis and application of agricultural data to design more accurate and targeted agricultural interventions.

Examples of The Use of New Technology in Agriculture

Satellite Imagery
Remote Sensing
Geographic Information Systems (GIS)

Information and Technology enable the transformation of data into actionable information.

Benefits of Agro-Informatics

- Enhanced Decision Making: With real-time data on soil health, weather patterns, and crop growth, farmers can make informed decisions that maximize their yield.
- Resource Optimization: Agriculture informatics helps optimize the use of resources such as water, fertilizers, and pesticides, reducing waste and environmental impact.
- Precision Agriculture: Through GPS and remote sensing technologies, farmers can precisely target their interventions, minimizing costs and environmental harm.

Benefits of Agro-Informatics

- Early Disease Detection: Monitoring tools and data analysis enable the early detection of disease outbreaks, preventing their spread and minimizing losses.
- Supply Chain Efficiency: Informatics streamlines the supply chain, reducing post-harvest losses and ensuring fresher produce reaches consumers.

Example of Agro-Informatics

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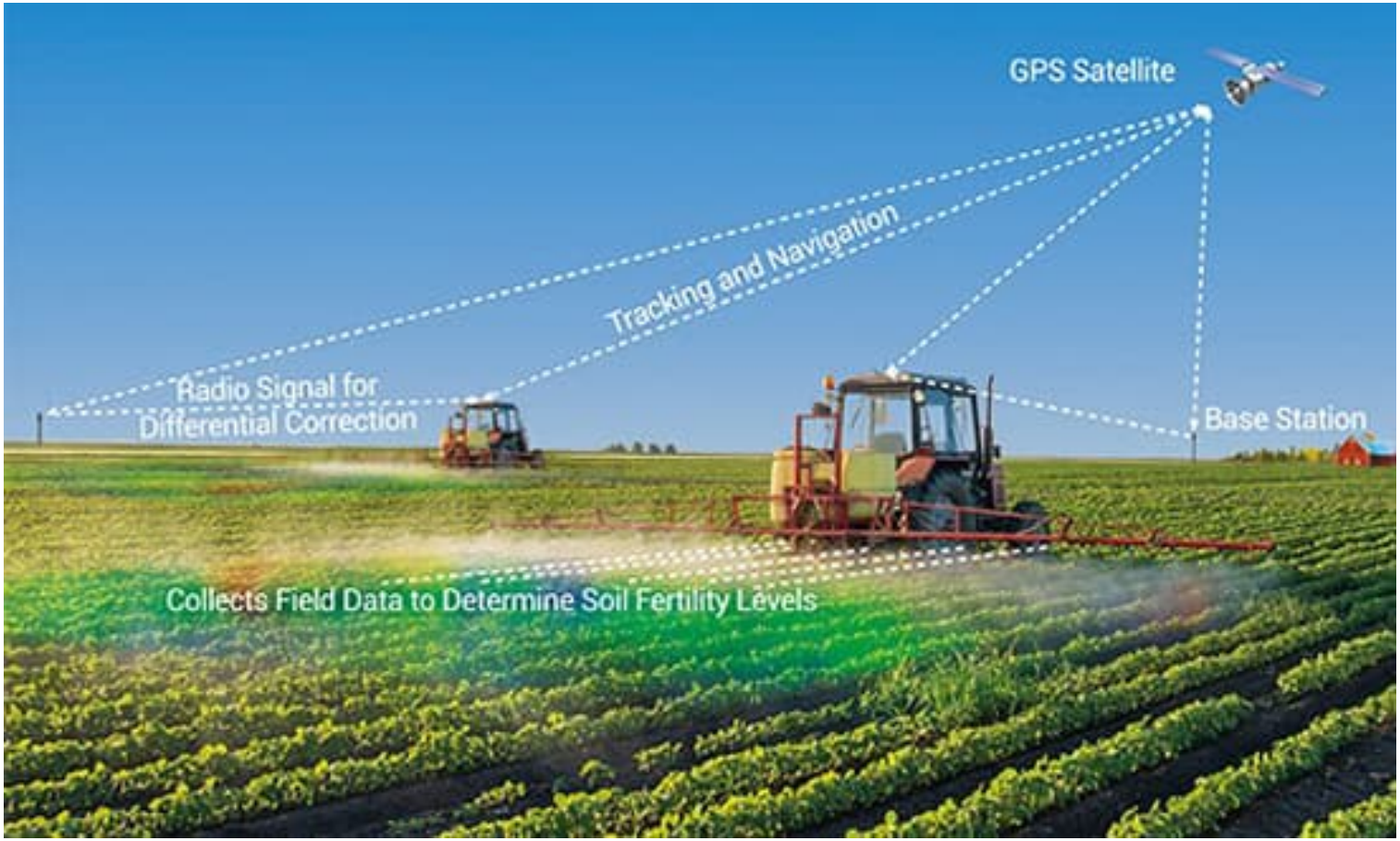

Example of Agro-Informatics

In this class,

- We will combine agricultural economics and computer science.
- We will learn about how to collect, store, and analyze a variety of data used in agriculutural econmics.

Data Collect

- A variety of sources of data and information related to agriculutral economics
- Statistics Korea, Bank of Korea, Government Agencies, AGRIX, etc
- International Agricultural Data (World Bank, FAO, etc)

Data Collect

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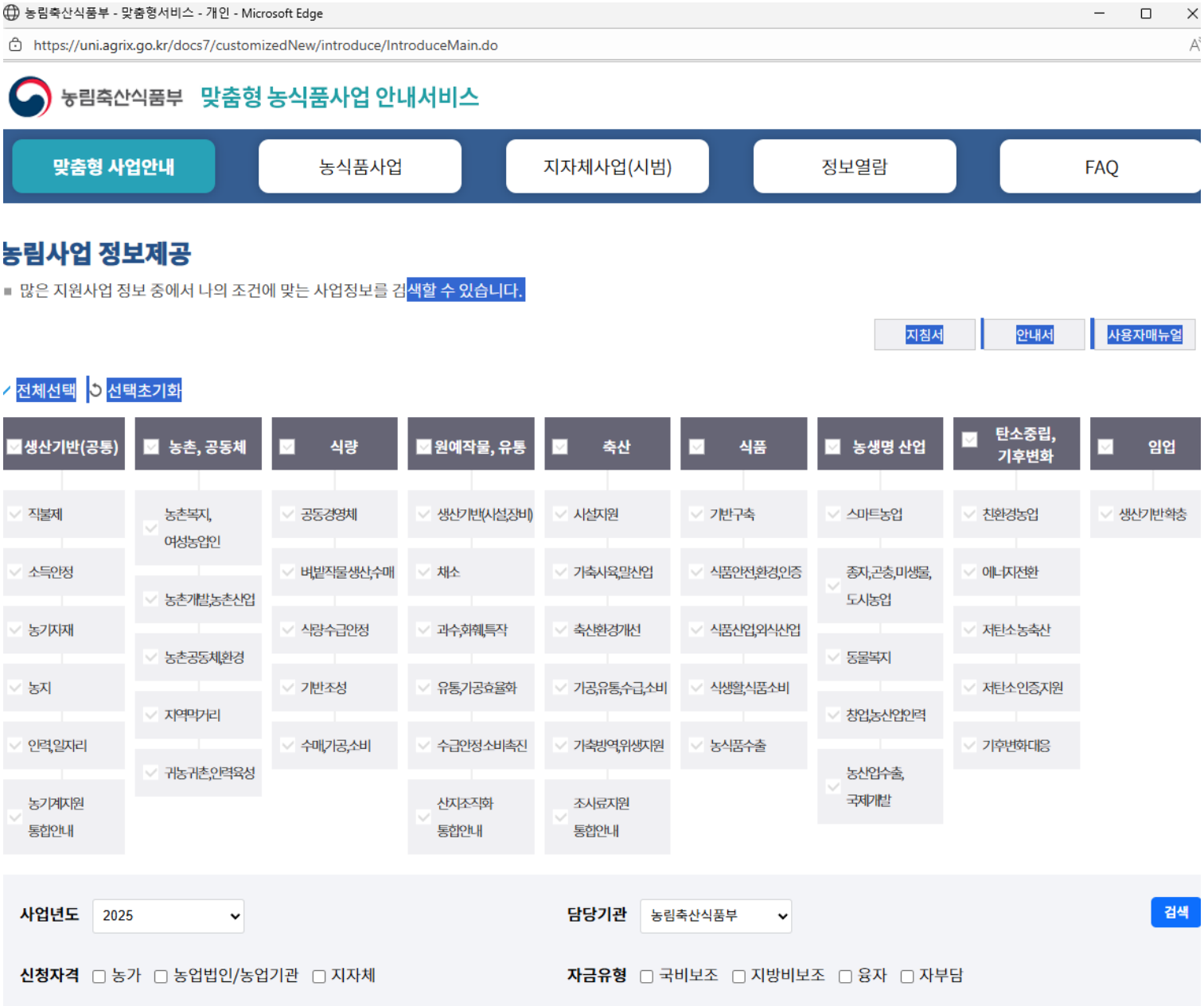

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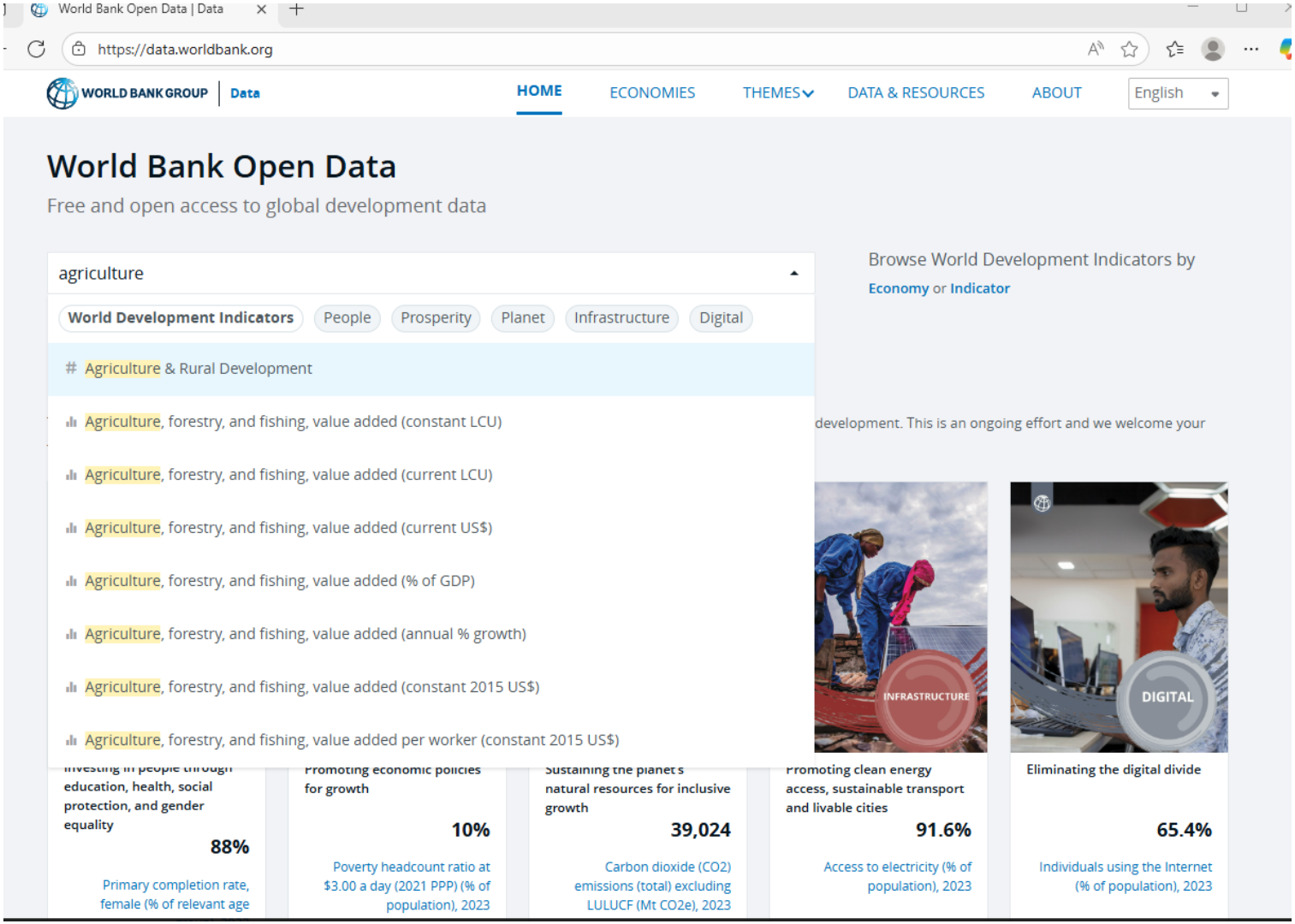

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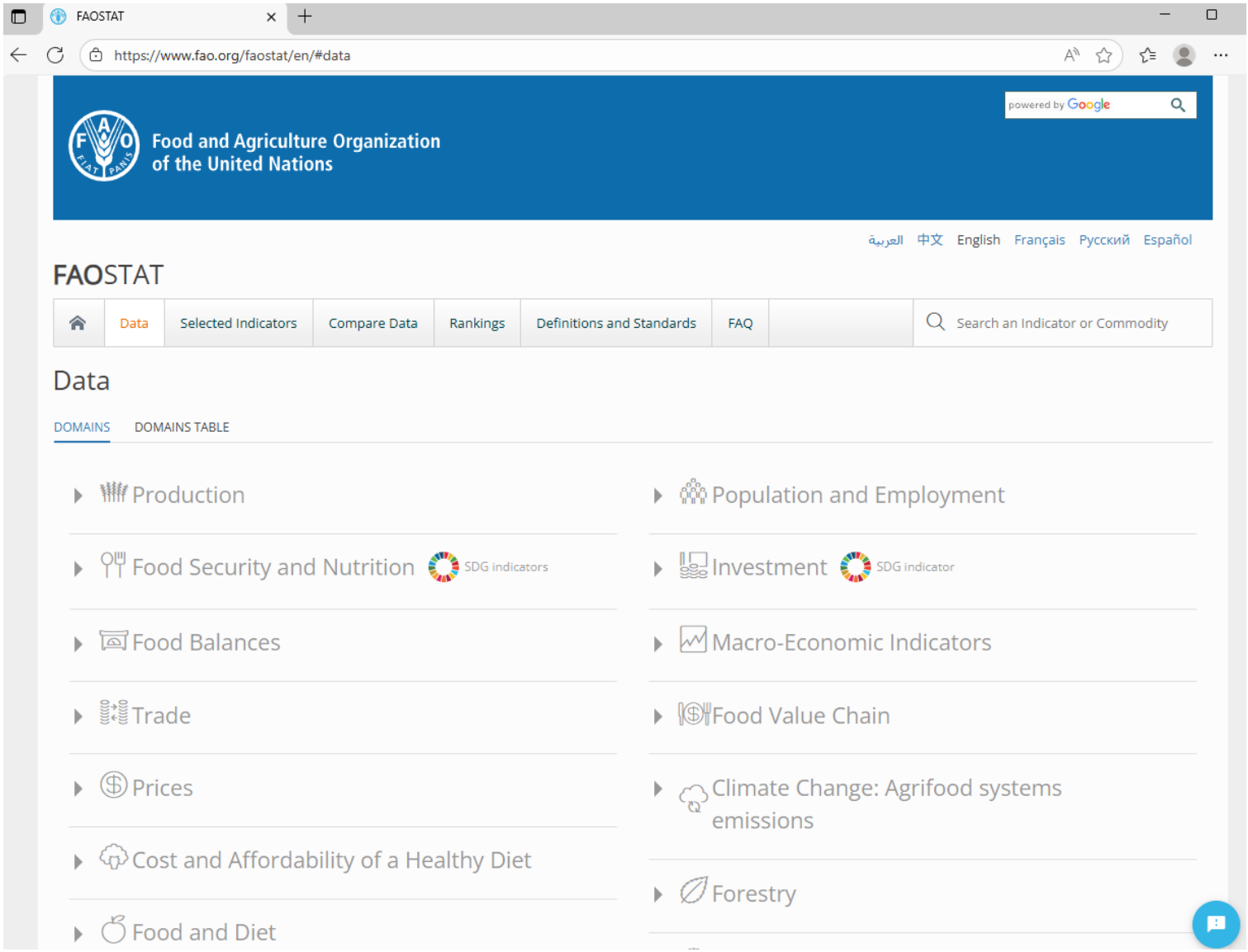

Data Store

- Database Management System (DBMS, e.g., MS ACESS)
- Enterprise Resource Planning (ERP)
- Structured Query Language (SQL)